

Title (en)  
Electro-pneumatic air pressure regulator

Title (de)  
Elektropneumatischer Luftdruckregler

Title (fr)  
Régulateur électro-pneumatique de la pression de l'air

Publication  
**EP 1484512 B1 20070328 (EN)**

Application  
**EP 04012797 A 20040528**

Priority  
JP 2003158753 A 20030604

Abstract (en)  
[origin: EP1484512A2] An electro-pneumatic air pressure regulator includes a primary pressure introduction port (12), a secondary pressure output port (13), a pilot pressure chamber (30), a main valve (15) for opening and closing a communicating conduit (14), a floating piston (20) which actuates the main valve, a nozzle conduit (46) via which the pilot pressure chamber (30) is communicatively connected to the atmosphere, a flapper (40) which includes a leaf spring (40a) facing an open end of the nozzle conduit, and an electromagnetic drive system (42) which deforms the leaf spring to vary a position of the flapper relative to the open end of the nozzle conduit in accordance with the magnitude of an analogue input signal. The flapper includes a conical projection which projects toward the open end of the nozzle conduit. A conical recess corresponding to the conical projection is formed on an end face of the nozzle conduit around the open end thereof. <IMAGE>

IPC 8 full level  
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CPC (source: EP KR US)  
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